

ENGINEERING I

Engineering I teaches students about student organizations and introduces them to the engineering design process along with ethical and safe practice standards. Concepts of 3D sketching and modeling by hand and with CAD software are introduced within the context of engineering design and prototype development. Robotics concepts in engineering are covered with understanding catalyzed by student competitions. This course also focuses on several fields of engineering and engineering technology specialization to include technical writing and analysis.

ENGINEERING II

Engineering II is a comprehensive course that focuses on Advanced CAD modeling and simulations. It also introduces students to modern manufacturing systems, or how robotics and drafting work together to create products. Electrical, fluid, and thermal systems are covered in more detail due to their relevance in real-world applications and industry. Additionally, the course teaches students advanced robotic concepts. Students will also learn valuable workforce readiness skills and prepare for jobs in the field of engineering, which will be demonstrated with all other parts of the course in a capstone unit.